

**A. CLASSIFICATION OF SUBJECT MATTER**  
**IPC 7 H04L27/26**

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

**IPC 7 H04L**

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>EP 1 148 673 A (LUCENT TECHNOLOGIES INC)  24 October 2001 (2001-10-24)</p> <p>page 2, line 21 - line 27  page 2, line 35 - line 44  page 3, line 23 - line 24  page 3, line 46 - line 57  page 4, line 5 - line 33  figure 4  figure 5</p> <p>-----</p> <p>-/-</p>	1,2, 4-13, 15-18

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

Date of the actual completion of the international search

22 September 2004

Date of mailing of the international search report

30/09/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Moreno, M

Best Available Copy

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 148 674 A (LUCENT TECHNOLOGIES INC) 24 October 2001 (2001-10-24)  page 2, column 1, line 38 - column 2, line 3 page 3, column 3, line 16 - line 26 page 3, column 4, line 18 - line 21 page 4, column 5, line 1 - line 11 page 4, column 5, line 31 - line 32 page 4, column 5, line 40 - line 51 page 5, column 7, line 16 - line 30 figure 4 figure 8 -----	1-5, 8, 10, 13, 15-18
A	WO 02/087139 A (MAGNOLIA BROADBAND INC) 31 October 2002 (2002-10-31) page 2, line 2 - line 3 page 2, line 14 - page 3, line 2 page 4, line 3 - line 5 figure 1 -----	1-18
A	US 5 867 478 A (BAUM KEVIN LYNN ET AL) 2 February 1999 (1999-02-02) column 1, line 7 - line 10 column 4, line 40 - line 43 column 5, line 56 - line 59 column 6, line 39 - line 45 column 7, line 7 - line 19 column 9, line 44 - line 51 column 13, line 9 - line 11 -----	1-18
A	EP 1 170 897 A (SONY INT EUROP GMBH) 9 January 2002 (2002-01-09) column 10, line 18 - line 35 figure 4 -----	1-18
A	US 2002/122381 A1 (MA JIANGLEI ET AL) 5 September 2002 (2002-09-05) page 3, column 2, paragraph 40 - paragraph 41 page 4, column 1, paragraph 43 -----	1, 2, 6, 7, 10, 15-18

Best Available Copy

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 1148673	A	24-10-2001	AU BR CA CN EP JP	3517501 A 0101426 A 2338471 A1 1318916 A 1148673 A2 2001358694 A	25-10-2001 13-11-2001 18-10-2001 24-10-2001 24-10-2001 26-12-2001
EP 1148674	A	24-10-2001	AU BR CA CN EP JP	3517701 A 0101459 A 2339515 A1 1318953 A 1148674 A2 2001358695 A	25-10-2001 04-12-2001 18-10-2001 24-10-2001 24-10-2001 26-12-2001
WO 02087139	A	31-10-2002	US WO WO US	2002118783 A1 02069523 A1 02087139 A1 2002172308 A1	29-08-2002 06-09-2002 31-10-2002 21-11-2002
US 5867478	A	02-02-1999	EP WO	0983654 A1 9859450 A1	08-03-2000 30-12-1998
EP 1170897	A	09-01-2002	EP CN JP US	1170897 A1 1331528 A 2002118534 A 2002003774 A1	09-01-2002 16-01-2002 19-04-2002 10-01-2002
US 2002122381	A1	05-09-2002	CA CA EP EP US US US	2351140 A1 2355433 A1 1185001 A2 1185048 A2 2002122383 A1 2002122382 A1 2002041635 A1	01-03-2002 01-03-2002 06-03-2002 06-03-2002 05-09-2002 05-09-2002 11-04-2002